

Facility ID: 0627010000 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0627010000 Emissions Unit ID: B007 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
(B007) - Boiler No.3 14.650 MMBtu/Hr Natural Gas Boiler with Fuel Oil Backup capabilities.	OAC rule 3745-31-05(A)(3) (PTI 06-06505 issued 07/05/07)	Particulate emissions (PE) shall not exceed 1.28 ton per year (tpy). Nitrogen oxides (NOx) emissions shall not exceed 6.3 tpy when using natural gas. NOx emissions shall not exceed 9.17 tpy when using No. 2 fuel oil.
	OAC 3745-31-05(C) (PTI 06-06505 issued 07/05/07)	Sulfur dioxide (SO2) emissions shall not exceed 32.08 tpy. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-10(B)(1), and 40 CFR Part 60 Subpart Dc. SO2 emissions from emissions units B002, B006, B007 and B008 combined shall not exceed 80.0 tons based on a rolling, 12-month summation.
	OAC rule 3745-17-07(A)	See section B. 3 below. Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 60% opacity.
	OAC rule 3745-17-10(B)(1) 40 CFR Part 60 Subpart Dc	PE shall no exceed 0.02 lb/mmBtu. No owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO2 in excess of 0.50 lb/million Btu heat input; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur.
	OAC rule 3745-18-06(D)	See section B.2 below.
	OAC rule 3745-21-07(B) OAC rule 3745-21-08(B)	See section A.2.d below. See section A.2.e below.

2. Additional Terms and Conditions

- (a) Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas or No. 2 fuel oil, a sulfur content limitation for No. 2 fuel oil, and the emission limitations listed in section A.1 above.
The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60,

are delegated to the Ohio Environmental Protection Agency (Ohio EPA).

The tons per year emission limitations for NOx are based on the emissions unit's potential to emit. Therefore, no monitoring, record keeping, and reporting requirements are necessary to ensure ongoing compliance with these emission limitations.

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revisions occur and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

B. Operational Restrictions

1. The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.
2. If the permittee chooses to comply with the SO₂ emission limit instead of the fuel sulfur limit, the quality of No. 2 fuel oil received for burning in this emissions unit shall have a combination of sulfur content and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 0.50 lb/mmBtu of actual heat input.
3. The fuel usage in boilers B002, B006, B007 and B008 shall not cause SO₂ emissions to exceed 80.0 tons per rolling 12-month period based on the following equation:

$$(A * 0.60 \text{ lb/MMscf}) + (B * (142 * S) \text{ lb/kgal}) \text{ 80.0 tons of SO}_2 \text{ per rolling-12 month period}$$

Where:

A = natural gas usage for the 12-month period (in MMscf);

B = No. 2 Fuel Oil usage for the 12-month period (in kgal); and

S = percent sulfur in No. 2 fuel oil as determined in sections C.1 for B002, B006, B007 and B008.

*If updates in AP-42 emissions factors (sections 1.3 and 1.4) occur for natural gas and/or No.2 fuel oil, the permittee shall use those updated factors in the above calculation.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the No. 2 fuel oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)].

c. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

2. The permittee shall collect and record the following information each month for emissions units B002, B006, B007, and B008 combined:

a. Fuel oil usage records in kgal;

b. Natural gas usage records in MMscf;

c. The emissions of SO₂ for each month in tons; and

d. The updated rolling, 12-month summation of SO₂ emissions in tons, calculated by adding information for the current month and the preceding eleven calendar months.

D. Reporting Requirements

1. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

a. construction date (no later than 30 days after such date);

b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);

c. actual start-up date (within 15 days after such date); and

d. date of performance testing (if required, at least 30 days prior to testing).

e. Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
50 West Town Street, Suite 700
P. O. Box 1049
Columbus, Ohio 43216-1049

and

Southeast District Office of the Ohio EPA
Division of Air Pollution Control
2195 Front Street
Logan, Ohio 43138.

2. The permittee shall notify the Ohio EPA Southeast District Office in writing of any fuel burned in this emissions unit other than natural gas or No. 2 fuel oil.
3. The permittee shall notify the Ohio EPA Southeast District Office in writing of any record which shows a deviation of the allowable SO₂ rolling, 12-month emission limitation for emissions units B002, B006, B007 and B008 combined.
4. The permittee shall notify the Ohio EPA Southeast District Office in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the record keeping requirements specified in section C.1 above.
5. The notifications identified in terms D.2, D.3 and D.4 shall include a copy of such record and shall be sent to the Ohio EPA Southeast District Office within 45 days after the deviation occurs.
6. The permittee shall submit annual reports that specify the total SO₂ emissions from this emissions unit during the previous calendar year. The reports shall be submitted by January 31 of each year.

E. Testing Requirements

1. Compliance with the emission limitations in section A.1 of these terms and conditions shall be determined in accordance with the following methods:
Emission Limitation(s): PE shall not exceed 0.02 lb/mmBtu.

Applicable Compliance Method: Compliance with the lb/mmBtu emission limitation shall be demonstrated by converting the 2 lbs PE/1000 gal emission factor (AP-42, 5th Edition, Section 1.3, Table 1.3-1, 9/98) into lbs PE/mmBtu by dividing by 140 mmBtu/1000 gal.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 5.
Emission Limitation(s): PE shall not exceed 1.28 tpy.

Applicable Compliance Method: Compliance with the annual emission limitation shall be demonstrated by multiplying the lb PE/mmBtu value by the maximum rated heat input capacity of the emissions unit (14.65 mmBtu/hr), then multiplying by 8,760 hrs/yr and dividing by 2,000 lbs/ton.
Emission Limitation(s): NO_x emissions shall not exceed 6.3 tpy when using natural gas.

Applicable Compliance Method:
The emission limitation was based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (7/98). Compliance with the annual emission limitation shall be determined by converting the 100 lbs NO_x/million SCF emission factor into lbs NO_x/mmBtu by dividing by 1,020 Btu/scf. Multiply the lb NO_x/mmBtu value by the maximum rated heat input capacity of the emissions unit (14.65 mmBtu/hr), then multiply by 8,760 hrs/yr and divide by 2,000 lbs/ton.
Emission Limitation(s): NO_x emissions shall not exceed 9.17 tpy when using oil.

Applicable Compliance Method: The emission limitations was based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.3, Table 1.3-1 (9/98). Compliance with the annual emission limitation shall be determined by converting the 20 lbs NO_x/thousand gallons emission factor into lbs NO_x/mmBtu by dividing by 140 mmBtu/thousand gallons. Multiply the lb NO_x/mmBtu value by the maximum rated heat input capacity of the emissions unit (14.65 mmBtu/hr), then multiply by 8,760 hrs/yr and divide by 2,000 lbs/ton.
Emission Limitation(s): No owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 0.50 lb/million Btu heat input.

Applicable Compliance Method: Compliance with the lb/mmBtu emission limitation may be based upon the record keeping in term C.1.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.
Emission Limitation(s): SO₂ emissions shall not exceed 32.08 tpy.

Applicable Compliance Method: Compliance with the annual emission limitation shall be determined by multiplying the annual average lb SO₂/mmBtu value by the annual average heat content and the total gallons of No. 2 fuel oil burned, and then dividing by 2,000 lbs/ton.
Sulfur Content Limitation(s): No owner or operator of an affected facility that combusts No.2 fuel oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur.

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping requirement specified in section C.1.

Emission Limitation(s): Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 60% opacity.

Applicable Compliance Method: If required, compliance shall be demonstrated through visible particulate emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR Part 60, Appendix A.

Emission Limitation(s): SO₂ emissions from emissions units B002, B006, B007 and B008 combined shall not exceed 80.0 tons based on a rolling 12 month summation.

Applicable Compliance Method: Compliance with the emission limitation shall be based upon the record keeping in term C.2.

F. Miscellaneous Requirements

1. None